

What is claimed is:

527 1 1. A method for determining computer hardware requirements for a  
2 database management system server comprising the steps of:

3 obtaining at least one user defined workload requirement;  
4 calculating the database management system server hardware requirements as  
5 a function of said user defined workload requirement; and  
6 displaying said database management system requirements.

1 2. A method according to claim 1, wherein said user defined workload  
2 requirement includes a plurality of inputs from a user including a server type, a maxi-  
3 mum desired processor utilization, and a transactions per second requirement.

4

1 3. A method according to claim 1, wherein said outputs include a number  
2 of processors requirement, a memory size requirement, and a mass storage  
3 requirement.

1 4. A method according to claim 1, wherein said outputs further comprise  
2 properties including an effective CPU utilization.

1 5. A method according to claim 1, wherein said outputs further comprise  
2 properties including a number of users supported.

1 6. A method according to claim 1, wherein said outputs further comprise  
2 properties including an effective CPU utilization and a number of users supported.

1           7.     A computerized method for determining computer hardware  
2     requirements for a database management system server as recited in claim 7, wherein  
3     said inputs include a baseline system transactions per second and said properties  
4     include a calculated transactions per second value, and a ratio of said calculated  
5     transactions per second to said baseline transactions per second, wherein said  
6     calculating step calculates values for said calculated transactions per second and said  
7     transactions per second ratio.

1       8.     A method for determining computer hardware requirements for a database  
2     management system server using a user-defined workload, the method comprising the  
3     steps of:  
4           obtaining at least one input from a user;  
5           obtaining from said user a plurality of transactions, wherein each of said  
6     transactions have a transaction workload contribution and an expected execution rate  
7     per second;  
8           calculating a total workload as a function of said transactions, transaction  
9     workload contribution, and transaction execution rate; and  
10           display said total workload to said human user.

1       9.     A method according to claim 8, wherein said inputs include a server  
2     type.

1       10.    A method according to claim 8, wherein said inputs include a  
2     maximum desired processor utilization.

1           11. A method according to claim 8, wherein said inputs include a  
2 maximum desired network interface card utilization.

1           12. A method according to claim 8, wherein said inputs include a server  
2 type, a LAN speed, a maximum desired processor utilization, a maximum desired  
3 network interface card utilization.

1           13. A method according to claim 12, wherein each of said transactions  
2 include at least one SQL statement wherein each of said transaction workloads are  
3 calculated by calculating a workload contribution of each of said SQL statements and  
4 wherein a percent contribution of total workload is specified,

1           14. A method according to claim 13, wherein said SQL statements include  
2 insert, delete, update, and select SQL statement types.

1           15. A method according to claim 14, wherein  
2            said insert SQL types have parameters including a number of identical insert  
3 statements, and wherein said insert statement SQL workload contribution is a function  
4 of said statement parameters,

5            said delete SQL types have parameters including a number identical delete  
6 statements, and wherein said delete statement SQL workload contribution is a  
7 function of said statement parameters,

8            said update SQL types have parameters including a number of records to be  
9 operated on by said update statement, and wherein said update statement SQL  
10 workload contribution is a function of said statement parameters, and

11        said select SQL types have parameters including selectivity criteria, and  
12    wherein said select statement SQL workload contribution is a function of said  
13    statement parameters.

*Argy*